

CLAIMS

What is claimed is:

1. A wafer cleaning apparatus with multiple wash-heads adapted for a wafer cleaning process, comprising:
5 a supporting base including a driving device, and
a rotation module having a top side connected with the driving device, and
the rotation module having multiple wash-heads;
wherein the bottom side of the wash-head is connected with a wafer, and by
using the driving device, the rotation module is wholly driven and the
10 wash-heads self-rotate along a cleaning path for cleaning wafers.
2. The apparatus according to claim 1, wherein said driving device comprises
a couple of first rotation axes, a couple of second rotation axes, a first
transmission belt, a second transmission belt, a third transmission belt, a
fourth transmission belt, a first motor and a second motor, and the first
15 transmission belt is mounted on the top side of the first rotation axis, and
the second transmission belt is mounted on the top side of the second
rotation axis, and the third transmission belt is mounted on the bottom side
of the first rotation axis, and the fourth transmission belt is mounted on a
bottom side of the second rotation axis, and the other side of the third
20 transmission belt is connected with the first motor, and the other side of the
fourth transmission belt is connected with the second motor.
3. The apparatus according to claim 2, wherein the first motor drives one of
the rotation axes which is conveyed by a third transmission belt, thereby to

drive the first transmission belt and further enable the first rotation axis to rotate the rotation module.

4. The apparatus according to claim 2, wherein the second motor drives the fourth transmission belt and further drives one of the second rotation axes thereby to drive the second transmission belt and enable the second rotation axis to rotate the rotation module for controlling the wash-heads to self-rotate and clean wafers.
5. The apparatus according to claim 1, wherein the rotation module includes a gear set for assisting the driving device to drive the wash-heads self-rotate.
- 10 6. The apparatus according to claim 5, wherein the second motor drives one of the second rotation axes which is conveyed by the fourth transmission belt, and thereby to drive the second transmission belt and enable the second driven axis to rotate the gear set of the second rotation module, and using the gear set to control the wash-heads for cleaning wafer by self-rotation.
- 15 7. The apparatus according to claim 1, wherein the rotation module has at least one nozzle, and the nozzle jets high-pressure water in the wafer cleaning process.
8. The apparatus according to claim 7, wherein the supporting base has at least one fluid pipe, and nitrogen passes through the fluid pipe and is jetted out from the nozzle of the rotation module.
- 20 9. The apparatus according to claim 7, wherein the supporting base has at least one fluid pipe, and deionized water passes through the fluid pipe and is jetted out from the nozzle of the rotation module.

10. The apparatus according to claim 7, wherein the supporting base has at least one fluid pipe, and the chemical liquid passes through the fluid pipe and is jetted out from the nozzle of the rotation module.
11. A wafer cleaning apparatus with multiple wash-heads adapted for a wafer cleaning process, comprising:
- 5 a supporting base including a driving device passed therethrough, and the driving device including a couple of first rotation axes, a couple of second rotation axes, a first motor, a second motor, wherein the second rotation axes pass through the first rotation axes individually, and the first transmission belt
- 10 is mounted on the top side of the first rotation axis, and the second transmission belt is mounted on the top side of the second rotation axis, and the third transmission belt is mounted on the bottom side of the first rotation axis, and the fourth transmission belt is mounted on the bottom side of the second rotation axis, and the other side of the third transmission belt is connected with
- 15 the first motor, and the other side of the fourth transmission belt is connected with the second motor; and
- a rotation module having a top side connected with one end of the first rotation axis, and this rotation module has multiple wash-heads;
- wherein the bottom sides of the multiple wash-heads are connected with the
- 20 wafer. Since the second motor drives the first and the third transmission belts, the first rotation axis makes the rotation module wholly driven, and moreover, when the second motor drives the second and the fourth transmission belts, the second rotation axis makes the rotation module self-rotate, and this leads that

the multiple wash-heads self-rotate for cleaning wafers.

12. The apparatus according to claim 11, wherein said rotation module comprises a gear set, a top fixed plate, a bottom fixed plate and a plurality of lock-up devices, and the gear set is arranged between the top and the bottom fixed plates, and by using the lock-up device and one of the first rotation axis, one of the lock-up device drives the rotation module wholly rotated.

13. The apparatus according to claim 12, wherein said one of the first rotation axes passes through the second rotation axis by using lock-up device, the second rotation axis makes the gear set be driven, therefore, each wash-head rotate by itself.

14. The apparatus according to claim 11, wherein said the rotation module has at least one nozzle, and the nozzle jets high-pressure water in the wafer cleaning process.

15. The apparatus according to claim 11, wherein the supporting base comprises with a fluid pipe, and nitrogen passes through the fluid pipe and is jetted out from the nozzle of the rotation module.

16. The apparatus according to claim 11, wherein said the supporting base has at least one fluid pipe, and the deionized water passes through the fluid pipe and is jetted out from the nozzle of the rotation module.

17. The apparatus according to claim 11, wherein the supporting base has at least one fluid pipe, and the chemical liquid passes through the fluid pipe and is jetted out from the nozzle of the rotation module.

18. The apparatus according to claim 12, wherein said top fixed plate and bottom fixed plate are made of Aluminum material.